

PREOBRAZHenskAYA, M.N.; UVAROVA, N.V.; SHEYNKER, Yu.M.; SUVOROV, N.N.

Syn-anti-isomerism of 3-aryl hydrazones of 6-methyl-2,3-piperidinedione. Dokl. AN SSSR 148 no.5:1088-1090 F '63. (MIRA 16:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im. S.Ordzhonikidze i Institut khimii prirodnikh soyedineniy AN SSSR. Predstavleno akademikom M.M.Shemyakinym.
(Piperidinedione) (Hydrazones) (Isomerism)

DVORYANTSEVA, G.G.; STRUCHKOVA, M.I.; SHEYNKER, Yu.N.

Integral intensities of infrared absorption bands of certain characteristic vibrations of cyclopentadienyl rings in ferrocene derivatives. Dokl. AN SSSR 152 no.3:617-620 S '63.

(MIRA 16:12)

1. Institut khimii prirodnikh soedineniy AN SSSR. Predstavleno akademikom A.N.Nesmeyanovym.

VOL'KENSHTEYN, B.V., doktor fiz.-matem. nauk, prof., red.;
 SHEYNKER, Yu.N., doktor khim. nauk, red.; SAMITOV,
 Yu.Iu., kand. fiz.-mat. nauk, red.; AFANAS'YEV, Y.I.,
 kand. khim. nauk, red

*(Transactions of the Conference on the Physical Methods of
 Study of Organic Compounds and Chemical Processes) Trudy
 soveshchaniia po fizicheskim metodam issledovaniia organi-
 cheskikh soedinenii i khimicheskikh protsessov. Frunze,
 Ilim, 1964. 268 p. (MIRA 17:11)*

1. Soveshchaniye po fizicheskim metodam issledovaniya
 organicheskikh soedinenii i khimicheskikh protsessov.
 Frunze, 1962. 2. Institut vysokomolekulyarnykh soedinenii
 AN SSSR, Leningrad (for Vol'kenshteyn). 3. Institut khimii
 priornykh soedinenii AN SSSR, Moskva (for Sheynker).
 4. Kazanskiy gosudarstvennyy universitet, Kazan' (for
 Samitov). 5. Institut organicheskoy khimii AN Kirgizskoy
 SSK, Frunze (for Afanas'yev).

PEREL'SON, M. A.; SHEINKER, Yu. N.; KATSEV, B. A.; LOZDISHEV, V. A.

Integrated intensities of carbonyl bands of the pyrone and
quinone series. Izv. AN SSSR. Ser. khim. no. 5:804-808 My '64.
(MIRA 17:6)

Institut khimii prirodnikh soyedineniy AN SSSR i Vsesoyuznyy
institut lekarstvennykh i aromaticeskikh rasteniy.

PEREL'SON, M.Ye.; SHEYNKER, Yu.N.; DMITRIYEVA, N.D.; LUK'YANETS, Ye.
A.; SHUSHERINA, N.P.; LEVINA, R.Ya.

Integrated intensities of $C=O$ bands in the infrared spectra
of substituted α -pyrones. Izv. AN.SSSR.Ser.khim. no. 5:938-
941 My '64. (MIRA 17:6)

1. Institut khimii prirodnikh soyedineniy AN SSSR i Moskovskiy
gosudarstvennyy universitet im. M.V.Lomonosova.

YAGUDAYEV, M.R.; POPOV, Ye.M.; YAKOVLEV, I.P.; SHEYNKER, Yu.N.

Frequencies and intensities of infrared absorption bands of the stretching and deformation vibrations of the NH_2 group in primary amines. Izv. AN SSSR Ser. khim. no.7:1189-1196 J1 '64.
(MIRA 17:8)

1. Institut khimii prirodnikh soedineniy AN SSSR i Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

L 10666-65 EWT(m)/EPF(c)/ENP(j) Pc-4/Pr-4 ASD(m)-3/AS(mp)-2/ASD(a)-5/
RPL RM

ACCESSION NR: AP4041155

8/0020/64/156/004/0873/0876

AUTHOR: Dvoryantseva, G. G.; Sheynker, Yu. N.; Yur'yeva, L. P.; Nesmeyanov, B
A. N. (Academician)

TITLE: Establishing the structure of several isomeric disubstituted ferrocenes
by their IR absorption spectra.

SOURCE: AN SSSR. Doklady*, v. 156, no. 4, 1964, 873-876

TOPIC TAGS: ferrocene, disubstituted ferrocene, structure, IR spectra, alkylferro-
cenylamide, alkylferrocenylnitrile, phenylferrocenylamide, phenylferrocenylnitrile,
NH sub 2 absorption, region, isomer, spatial hindrance, spectral
integral intensity

ABSTRACT: The IR absorption spectra of several alkyl- and phenylferrocenylamides
and alkylferrocenylnitriles were examined to determine the structure of the
isomers. There are differences in the absorption in the 910-920 cm^{-1} region in
mono- or heterocyclic disubstituted ferrocenes and in pairs of homocyclic disub-
stituted isomers, but because of difficulties in identifications in this region,
an intensive examination was made of the frequency and intensity characteristic of
the C=O and NH_2 groups. In the 1,2-isomers there are differences in the 1600-1700

Card 1/3

L 10666-65

ACCESSION NR: AP4041155

(C=O) and 3100-3500 cm^{-1} (NH_2) regions: the band for the deformed vibrations of the NH_2 group splits simultaneously with a decrease in the splitting of the bands in the region of the NH valency vibrations; the spectra contain absorption bands for both free and bonded NH-groups. In the 1,3-isomers of methylferrocenylamide and phenylferrocenylamide there is not splitting of the NH_2 band (in the corresponding ethyl derivative the slight splitting is explained by the effect of the ethyl radical on the amide group). The spectra of the 1,3-isomers in CCl_4 are somewhat similar to spectra of solutions of the corresponding 1,1'-derivatives; they have no bands characterizing bonded NH-groups. The isomers differ in the integral intensity of the carboxylic amide group. The ethyl group in the 1,1'- and 1,3-isomers increases the integral intensity in comparison to that of the unsubstituted ferrocenylamide. In the 1,2-isomers, methyl and ethyl substituents do not cause this increase, apparently due to loss of conjugation of the amide group with the cyclopentadienyl ring because of spatial hindrance. These conclusions about the structure of these compounds based on IR spectra are in agreement with oxidation-reduction potentials, UV spectra and comparative adsorptions on Al_2O_3 . Further studies are being conducted. Orig. art. has: 2 tables and 2 figures.

ASSOCIATION: Institut khimii prirodnykh soedineniy Akademii nauk SSSR

Card 2/3

L 10666-65

ACCESSION NR: AP4041155

(Institute of the Chemistry of Natural Compounds, Academy of Sciences SSSR);
Institut elementoorganicheskikh sovedininy Akademi nauk SSSR (Institute of
Organometallic Compounds Academy of Sciences SSSR)

SUBMITTED: 14Feb64

ENCL: 00

SUB CODE: OC, OP

NO REF SOV: 004

OTHER: 003

Card 3/3

L 52565-65 EPP(9)/EWP(3)/E+T(1) Y-14/1-1 RM

ACCESSION NR: AP5015797

UR/0062/64/000/011/1979/1984

23

22

8

AUTHOR: Senyavina, L. B.; Dyatlovitskaya, E. V.; Sheynker, Yu. N.; Bergel'son, L. D.

TITLE: Infrared spectra of acylmethylenetriphenylphosphoranes and their salts

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 11, 1964, 1979-1984

TOPIC TAGS: organic phosphorus compound, IR spectrum, IR spectroscopy

Abstract: The infrared spectra of a number of alpha-acylmethylenetriphenylphosphoranes and the corresponding phosphonium salts were studied on the assumption that increasing the polarity of the carbonyl group should produce a substantial increase in the intensity of the C=O band. Special attention was paid to the measurement of the intensities of the bands of the valence vibrations of carbonyl in these compounds. The infrared spectra of seven of the compounds were characterized for the first time. Carbonyl-containing triphenylphosphonium salts

Card 1/2

L 52565-65

ACCESSION NR: AP5015797

$[(C_6H_5)_3P^+CHCOR]Hal^-$ were found to possess frequencies of the valence

vibration of carbonyl close to the known values of the frequencies for saturated carbonyl-containing compounds, while in the phosphoranes $(C_6H_5)_3P=CR_1-CO-R$, the position of the absorption band of carbonyl was shifted 100-180 cm^{-1} into the low-frequency region. The intensities of the carbonyl bands in the spectra of acylmethylenetriphenylphosphoranes were substantially increased, while in the spectra of the salts they were somewhat lowered in comparison with the normal values. The data obtained agree with an ylide structure of acylmethylenetriphenylphosphoranes, in which the polarity of the C=O groups is greatly increased, and the negative charge is localized to a considerable degree on the oxygen, rather than on the ylide carbon, as in alkylidenephosphoranes. Orig. art.

has 1 formula, 2 graphs, and 1 table.

ASSOCIATION: Institut khimii prirodnikh soedineniy Akademii nauk SSSR (Institute of the Chemistry of Natural Compounds, Academy of Sciences, SSSR)

SUBMITTED: 06Feb63

ENCL: 00

SUB CODE: OC, OP

NO REF SOV: 003

OTHER: 012

JPRS

Card 2/2 *mb*

SHEYNKER, Yu.N.; SENYAVINA, L.B.

Position and the intensity of antisymmetrical stretching band
of the N_3 group in the infrared spectra of organic azides.
Izv. AN SSSR Ser. khim. no.11:2113 N '64 (MIRA 18:1)

1. Institut khimii prirodnikh soyedineniy AN SSSR.

PERESLENI, Ye.M.; SHEYNKER, Yu.N.

Tautomerism of some derivatives of heterocyclic compounds.

Part 15. Zhur. fiz. khim. 38 no.9:2152-2157 S '64.

(MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-formatsevticheskiy institut imeni Ordzhonikidze, Moskva.

SHEYNKER, Ya.N.; PEK, G.Yu.; PEREL'SON, M.le.

Nuclear magnetic resonance spectra of natural coumarins
and furcoumarins. Dokl. AN SSSR 158 no.6:1382-1385 G '64.
(MIRA 17:12)

1. Institut khimii prirodnikh soyedineniy AN SSSR i Vsesoyu nyy
institut lekarstvennykh i aromaticeskikh rasteniy. Predstavleno
akademikom M.M. Shemyakinym.

PEREL'SON, M.Ye.; NIKONOV, G.K.; PEK, G.Yu.; SHEYNKER, Yu.N.

Structure of xanthogalol and zosimol. Dokl. AN SSSR 159
no.1:154-157 N '64. (MIRA 17:12)

1. Vsesoyuznyy institut lekarstvennykh i aromaticeskikh
rasteniy i Institut khimii prirodnikh soedineniy AN SSSR.
Predstavleno akademikom M.M. Shemyakinym.

SHCHUKER, Yu.N.; ZATSEV, B. Ye.; PEREL'SON, M. Ye.

Integral intensities of carbonyl bands in the infrared spectra
of some cyclic compounds. Izv. AN SSSR Ser. khim. no.11:2114
N '64 (MIRA 18:1)

1. Institut khimii prirodnikh soyedineniy AN SSSR i Vsesoyuznyy
institut lekarstvennykh i aromaticeskikh rasteniy.

NESMEYANOV, A.N., akademik; DVORYANTSEVA, G.G.; KOCHETKOVA, N.S.;
MATERIKOVA, R.B.; SHEYNER, Yu.N.

Properties and structure of dicyclopentadienylmercury. Dokl.
AN SSSR 159 no.4:847-850 D '64 (MIRA 18:1)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

PERESLENI, Ye.M.; SHEYNKER, Yu. N.; ZOSIMOVA, N.P.; POMERANTSEV, Yu.I.
(Moskva)

Tautomerism of some derivatives of heterocyclic compounds.
Report 17. Zhur. fiz. khim. 39 no. 192-99 Ia '65
(MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut. Submitted February 27, 1964.

SENYAVINA, L.B.; SHEYNKER, Yu.N.; ZHELTOVA, V.N.; DOMBROVSKIY, A.V.;
SHEVCHUK, M.I.

Infrared spectra of aroylmethylenetriphenylphosphoranes and
their salts. Izv. AN SSSR. Ser. khim. no.5:895-898 '65. (MIRA 18:5)

1. Institut khimii prirodnikh soedineniy AN SSSR.

L 46186-65 EWT(1)/EWT(m)/EPF(c)/EWP(j)/EEC(t) Pc-4/Pr-4/Pl-4 EJP(c)
WN/GG/RM

ACCESSION NR: AP5007562

S/0020/65/160/005/1075/1078

AUTHOR: Dvoryantseva, G. G.; Portnova, S. L.; Grandberg, K. I.; Gubin, S. P.;
Sheynker, Yu. N.; Nesmeyanov, A. N.

TITLE: Nuclear magnetic resonance spectra of ferrocene²¹ derivatives

SOURCE: AN SSSR. Doklady, v. 160, no. 5, 1965, 1075-1078

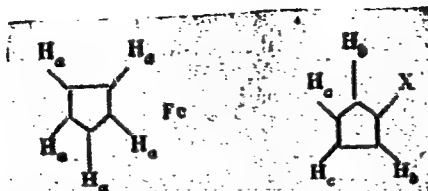
TOPIC TAGS: nuclear magnetic resonance, ferrocene, proton resonance, Hammett constant, cyclic compound, cyclopentadienyl metal

ABSTRACT: The authors measured the chemical shifts of proton signals in high-resolution nuclear magnetic resonance spectra of mono- and heteroannular disubstituted ferrocenes, using 10-15% solutions in CCl₄ and an INM-C-60 nuclear magnetic resonance spectrometer. In the proton resonance spectra of all monosubstituted ferrocenes, a singlet is produced by the five equivalent protons of the unsubstituted five-membered ring, and two triplets are produced by the (i) and (o) protons of the substituted ring with a spin-spin interaction constant $J_{oi} = 1.5$ cps.

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L 46186-65

ACCESSION NR: AP5007562



It was found that the chemical shifts of protons of the unsubstituted ring are chiefly determined by the induction effect of the substituents. The observed values of the shifts δ_b and δ_c indicate a considerable effect of the conjugation of the substituent on the chemical shifts of protons of the substituted ring. Correlations are presented between the values of $\delta_c - \delta_a$ and the conjugation constants of the substituents, between the chemical shifts and the induction constants of the substituents, and between the chemical shifts of protons of the substituted rings and the Hammett constants σ of the substituents. The results of the study make it possible to draw a close analogy between the magnitude and character of the influence of the substituents on the (a), (b), and (c) hydrogen atoms of the ferrocenyl nucleus, and correspondingly on the meta, ortho, and para hydrogen atoms of the phenyl nucleus. Orig. art. has: 3 figures, 2 tables, and 5 formulas.

Card 2/3

L 46186-65

ACCESSION NR: AP5007562

ASSOCIATION: Institut khimii prirodnikh soedineniy Akademii nauk SSSR (Institute of Chemistry of Natural Compounds, Academy of Sciences SSSR); Institut elemento-organicheskikh soedineniy Akademii nauk SSSR (Institute of Organometallic Compounds, Academy of Sciences SSSR)

SUBMITTED: 20Jul64

ENCL: 00

SUB CODE: NP, OC

NO REF SOV: 007

OTHER: 004

me
Card 3/3

SHEVCHUK, Yu.N.; SENYATINA, L.R.; CHELTOVA, V.N.

Position and intensity of the absorption band of the antisymmetric valence vibration of the group N_3 in the infrared spectra of organic azides. Dokl. AN SSSR 160 no.6:1339-1342 F '65.

(MIRA 18:2)

1. Institut khimii prirodnnykh soyedineniy AN SSSR. Submitted August 29, 1964.

DVORYANTSEVA, G.G.; SHEYNKER, Yu.N.; NESMEYANOV, A.N., akademik; NOGINA, O.V.;
LAZAREVA, N.A.; DUBOVITSKIY, V.A.

Infrared spectra of some cyclopentadienyl compounds of titanium.
Dokl. AN SSSR 161 no.3:603-606 Mr '65.

(MIRA 18:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i Institut
khimii prirodnikh soyedineniy AN SSSR.

NEFEDOV, O.M.; KOLESNIKOV, S.P.; SHEYCHENKO, V.I.; SHEYNER, Yu.N.

Etherates of trihalogermanac studies by nuclear magnetic resonance spectroscopy. Dokl. AN SSSR 162 no.3:589-592 My '65. (MIRA 18:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR i Institut khimii prirodnikh soedineniy AN SSSR. Submitted July 21, 1964.

PERESLENI, Ye.M.; SHEYNKER, Yu.N.; ZOSIMOVA, N.P.

Tautomerism of some derivatives of heterocyclic compounds.
Part 17. Zhur. fiz. khim. 39 no.4:926-931 Ap '65.
(MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut. Submitted Nov. 30, 1963.

SHCHIPANOV, V.P.; PORTNOVA, S.L.; KRASNOVA, V.A.; SHEYNKER, Yu.N.;
POSTOVSKIY, I. Ya.

Structure and spectra of 5-aminotetrazoles and their acyl
derivatives. Zhur. org. khim. 1 no. 12:2236-2244 D '65
(MIRA 19:1)

1. Ural'skiy politekhnicheskiy institut imeni Kirova i Institut
khimii prirodnikh soyedineniy AN SSSR. Submitted December 9,
1964.

YAGUDAYEV, M.R.; SHEYNKER, Yu.N.

Integral intensity of bands of stretching and deformation
vibrations of a primary amino group in different solvents.
Uzb.khim.zhur. 8 no.4:86-88 '64.

(MIRA 18:12)

1. Institut khimii rastitel'nykh veshchestv AN UzSSR.
Submitted August 22, 1963.

LOKSHIN, G.P.; KHOKHLOV, A.S.; SHEYNKER, Ya.N.; SENYAVINA, L.B.

Chemical and spectroscopic study of albonoursin. Khim. prirod.
soed. no.6:395-400 '65. (MIRA 19:1)

1. Institut khimii prirodnnykh soedineniy AN SSSR i Vsesoyuznyy
nauchno-issledovatel'skiy institut antibiotikov. Submitted
Feb. 5, 1964.

L. 10-10 11(m)/102(j) RM/CD-2

ACC NR: AP6012080

SOURCE CODE: UR/0062/65/000/005/0895/0898

AUTHOR: Senyavina, L. B.; Sheynker, Yu. N.; Zheltova, V. N.; Dombrovskiy, A. V.;
Shevchuk, M. I.; Kabachnik, M. I.; Mastryukova, T. A.; Melent'yeva, T. A. 16
B

ORG: Institute of the Chemistry of Natural Compounds, AN SSSR (Institut khimii prirodnikh soyedineniy AN SSSR)

TITLE: Infrared spectra of aroylemethylenetriphenylphosphoranes and their salts 11445

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 5, 1965, 895-898

TOPIC TAGS: IR spectrum, organic salt, organic phosphorous compound, electron donor, cyclic group

ABSTRACT: The integral intensities of the carbonyl absorption in the infrared spectra of aroylemethylenetriphenylphosphoranes (in which the carbonyl group is bonded to a phenyl ring) and their salts were measured. The data were considered from the standpoint of electron donor and electron acceptor properties of the phosphorus atom and the aromatic rings of the aroyle group, as well as the influence of substituents in the aromatic ring on the absorption intensity. The addition of an aromatic group to the carbonyl in phosphoranes led to a decrease in the frequency and intensity of the valence vibration of the carbonyl group in comparison with the corresponding aliphatic derivatives, evidently as a result of the functioning of the aromatic ring as an electron acceptor, competing with the carbonyl group for electrons from the strong electron-donor phosphorus atom. The frequency and in-

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UDC: 543.422 2

ACC NR: AP6012080

tensity of the C=O vibration are also determined by the configuration of the molecule, determined in turn by the size of the substituent at the carbonyl group. In phosphorane salts, the tetravalent positive phosphorus plays the role of an electron acceptor, resulting in a sharp drop in the intensity of the C=O band in comparison with phosphoranes. The absorption bands in the region of $1317-1390\text{ cm}^{-1}$ for arylmethylenetriphenylphosphoranes and $1389-1412\text{ cm}^{-1}$ for aroylmethyltriphenylphosphoranes were tentatively assigned to the vibration of the P=C band. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 20Jul64 / ORIG REF: 005 / OTH REF: 004

Card 2/2/77

L 04262-67 EWT(1)/EWT(m)/EWP(j)/T/EWP(k)/EWP(1) IJP(c) WG/RIW/RM

ACC NR: AP6030020

SOURCE CODE: UR/0020/66/169/005/1083/1086

AUTHOR: Dvoryantseva, G. G.; Yur'yeva, L. P.; Portnova, S. L.; Sheynker, Yu. N.; 42
Nesmeyanov, A. N. (Academician) B

ORG: Institute of Chemistry of Natural Compounds, Academy of Sciences SSSR (Institut khimii prirodnnykh soedineniy Akademii nauk SSSR); Institute of Hetero-Organic Compounds, Academy of Sciences SSSR (Institut elementoorganicheskikh soedineniy Akademii nauk SSSR)

TITLE: Proton magnetic resonance spectra of disubstituted ferrocenes 7

SOURCE: AN SSSR. Doklady, v. 169, no. 5, 1966, 1083-1086

TOPIC TAGS: proton resonance, ferrocene, analytic chemistry, spectrum analysis

ABSTRACT: The proton magnetic resonance spectra of 25 heteroannular disubstituted ferrocenes with various substituents in both rings were taken and the rule of additivity of chemical shifts of the ring protons was established. The structure of several homoannular isometric amides of methyl- and ethylphenyl-ferrocene carboxylic acids and nitriles of ethyl- and phenyl ferrocene carboxylic acids was defined on the basis of the PMR spectra. The PMR spectra were measured using 10% solutions in CCl₄ and CDCl₃ and a JNMC-60 spectrometer with an operating frequency of 60 megacycles. In all cases excellent agreement was observed between the experimentally determined chemical shifts

UDC: 538.113+547.13+546.72

Card 1/2

L 04262-67

ACC NR: AP6030020

for the ring protons and the chemical shifts calculated using the additivity rule.
Orig. art. has: 2 tables.

SUB CODE: 07/

SUBM DATE: 12Feb66/

ORIG REF: 004/

OTH REF: 003

Card 2/2 fv

L 60361-65 EWA(h)/EWP(k)/EWT(d)/EWT(l)/EWP(h)/ETC(m)/EEC(m)/EWA(d)/EWP(l)/EWP(v)
 Pf-l/Pf-l/Pc-l/Pq-l/Pe-l/Peb WW
 UR/0286/65/000/012/0085/0085
 681.121
 ACCESSION NR: AP5019057

AUTHORS: Podgoyetskiy, M. L.; Shvarts, V. I.; Sheynkerman, E. Z.; Shvarts,
L. I.; Turina, M. A.; Fateyeva, N. V.

TITLE: Pneumatic flow meter. ⁹ Class 42, No. 172074

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 85

TOPIC TAGS: flow meter,¹⁴ pneumatic device

ABSTRACT: This Author Certificate presents a pneumatic flow meter containing a measuring unit and a pneumatic transducer. To increase the accuracy of measurement, the sensitive unit of the measuring unit is in the form of a membrane. The membrane is provided with a constricting device, e.g., a throttle, which is kinematically coupled by a system of levers to a compensation unit (see Fig. 1 on the Enclosure). To eliminate natural vibrations and to obtain zero compensation, an integrating regulator is included in the feedback channel. Orig. art. has: 1 diagram.

ASSOCIATION: Konstruktorskoye byuro "Tsvetmetavtomatika" pri gosudarstvennom komitete tyazhelogo energeticheskogo transportnogo mashinostroyeniya pri gosplane, SSSR (Construction Bureau "Automatic Equipment for Nonferrous Metals" for the State Committee of Heavy Power Transport Machine Construction for Gosplan, SSSR)

Card 1/3

L 60361-65

ACCESSION NR: AP5019057

SUBMITTED: 20 May 63

ENCL: 01

SUB CODE: IE

NO REF SOV: 000

OTHER: 000

Card 2/3

L 60361-65

ACCESSION NR: AP5019057

ENCLOSURE: 01

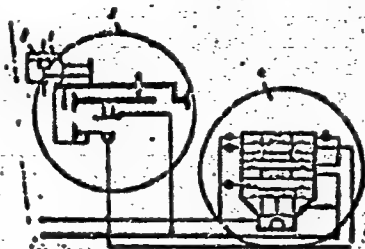


Fig. 1.

1- membrane; 2- constricting device; 3- compensation unit;
4- integrating regulator

Card

SC
3/3

1ST AND 2ND CODES										3RD AND 4TH CODES									
PROCESSES AND PROPERTIES INDEX																			
SHEYNKIN, B. L.																			
<p>228-13. Welded Shells for Blast Furnaces. (In Russian.) B. L. Sheynkin and V. L. Tsegel'skii. <i>Aviatsionnoe Delo</i> (Welding), no. 9, Sept. 1948, p. 1-3. Structural and welding details.</p>																			
METALLURGICAL LITERATURE CLASSIFICATION										CROSS REFERENCE									
<p>228-13.1 A</p>										<p>228-13.1 A</p>									

Handwritten marks: 'K' in top right, '✓' in bottom right.

SHEYNKIN, B.L.

Introduction of new organization and production methods in structural-steel
work. Stroi.prom. 31 no.6:15-17 Je '53. (MLRA 6:7)

1. Treest Stal'montazh.

(Building, Iron and steel)

SHEYNKIN, B.L.; DAVIDOVSKIY, I.Z.

Rapid construction of a blast furnace for the Orsk-Khalilovo
Metallurgical Combine. Prom. stroi. 37 no.1:45-50 Ja '59.
(MIRA 12:1)

1. Trest Stal'montazh.
(Orsk-Khalilovi Industrial District--Blast furnaces)

SHEYNKIN, G.Yu.

Measures for combating swamping and alkalinity of land in the
Shuroabad irrigation system. Izv.Otd.est.nauk AN Tadzh.SSR
no.12:79-94 '55. (MLRA 9:10)

1. Nauchno-issledovatel'skoye byuro Moskovskogo instituta
inzhenerov vodnogo khozyaystva.
(Kuybyshev District (Tajikistan)--Reclamation of land)

SHEYNKIN, G. YU.

SHEYNKIN, G. YU. "Operational methods of combating alluvium in irrigation systems by the use of lake-type settling tanks (on the example of Bakhshskaya Valley)." Min Higher Education USSR. Moscow Inst of Water Economy Engineers imeni V. R. Vil'yams. Moscow, 1956. (Dissertation for the Degree of Candidate in Technical Science)

So: Knizhnaya letopis', No. 15, 1956. Moscow.

USSR/Cultivated Plants - Commercial. Oil-Bearing. Sugar-Bearing. M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82415

Author : Sheyakin, G. Vedenyapin, V., Gorbunova, Ye.

Inst :
Title : Experiment in the Application of Concentrated Irrigation
of Cotton Plant in Vakhshskaya Valley

Orig Pub : Khilopkovodstvo, 1957, No 12, 32-38

Abstract : In accordance with the proposal of the Moscow Institute of Water Management Engineers, the old system of cotton irrigation in a number of kolkhozes of Tadzhik SSR (irrigation of small isolated fields during several days) was substituted with a new system of concentrated waterings in which the area of a simultaneous watering was increased by two-three times and was brought to the area of the daily performance of the tractor. Application of concentrated irrigation provides a simultaneous readiness of the soil of the plot, decreases the interval between the

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NATAL'CHUK, M.F.; VEDENYAPIN, V.Ye.; SHEYNKIN, G.Yu.; CORBUNOVA, Ye.N.

Planning and carrying out the irrigation of cotton on
collective and state farms within the Vakhsh irrigation
system. Trudy AN Tadzh.SSR 78:193-254 '57.
(MIRA 13:3)

(Vakhsh Valley--Cotton growing)
(Vakhsh Valley--Irrigation)

NATAL'CHUK, M.F., dots.; SHEYNKIN, G.Yu., kand. tekhn. nauk; VEDENYAPIN,
V.Ye., inzh.; VOROPAYEV, G.V., inzh.; GORBUNOVA, Ye.N., inzh.;
TROITSKIY, A.A., red.; STARKETS, R., red.; POLTORAK, I., tekhn. red.

[Organizing concentrated irrigation of cotton] Organizatsiya
sosredotochennykh polivov khlopchatnika. Stalinabad, Tadzhik-
skoe gos. izd-vo, 1958. 33 p. (MIRA 11:10)
(Cotton growing) (Irrigation farming)

SHEYNKIN, G. Yu.

99-58-5-8/10

AUTHORS: Bogushevskiy, A.A.; Yegorov, V.I.; Sheynkin, G.Yu.

TITLE: Anniversary Scientific Conference of the Moscow Institute of Engineers of Hydraulic Engineering imeni V.R. Williams (Yubileynaya nauchnaya konferentsiya Moskovskogo instituta inzhenerov vodnogo khozyaystva imeni V.R. Vil'yamsa)

PERIODICAL: Gidrotekhnika i Melioratsiya, ¹⁰Nr 5, pp 56-59 (USSR), 1958

ABSTRACT: This conference was convened in Moscow in November 1957, on the occasion of 40-th Anniversary of the October revolution. Representatives of 38 institutes, ministries, academies of sciences, and other organizations participated: 80 reports were made on different branches of hydro-melioration engineering among them the review lectures of Dotsents S.F. Aver"yanov, N.A. Karambirov, N.D. Kremenetskiy, Academicians A.N. Askochenskiy, Ye.A. Zamarin, and professors M.F. Poyarkov, D.Ya. Sokolov and M.M. Florinskiy. In the Section of Agricultural Melioration and Water-Supply 27 reports were read. The melioration of bottom lands was the subject of the reports of: Candidate of Agricultural Sciences Ye.S. Markov, Professor

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99-58-5-8/10

Anniversary Scientific Conference of the Moscow Institute of Engineers
of Hydraulic Engineering imeni V.R. Williams

I.I. Plyusnin, Dotsents T.A. Lobanova and I.A. Vernikovskaya (MIIVKh). The projecting-type of meliorative systems, construction and operation of drainage were reported by: Engineer P.G. Fialkovskiy (Rosgiprovdkhkh) Candidate of Technical Sciences V.A. Rozin (SevNIIGiM), Engineer P.B. Sviklis (LatNIIGiM) and Candidate of Technical Sciences R.Ya. Narodetskaya (Rosgiprovdkhkh). New techniques in the field of irrigation were reported on by: Candidates of Technical Sciences A.A. Bogushevskiy and M.Z. Gankin (Giprovdkhkh) and the Engineer S.Z. Tsanov (MIIVKh). Questions of planning in cotton-growing regions of Central Asia were reported on by Candidates of Technical Sciences, A.N. Lyapin (TIIMSKh) and N.P. Samsonova (VNIIGiM). The questions of rural water supply were reported on by: Dotsent N. A. Karambirov (MIIVKh), Dotsent S.N. Gusev (MIIVKh) and Rosgiprovdkhkh), Engineer N.P. Frog (Giprovdkhkh) and Engineer V.A. Ruzhinskaya (Lengiprovdkhkh). Professor A.L. Rubinshteyn and Dotsent I.I. Trofimov (MIIVKh) reported on the problem

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99-58-5-8/10

Anniversary Scientific Conference of the Moscow Institute of Engineers
of Hydraulic Engineering imeni V.R. Williams

of loess soil. The water losses to irrigation canals and the question of reducing them were the objects of the reports by: Academician V.V. Poslavskiy, Candidates of Technical Sciences S.A. Girshkan (Glavvodkhoz MSKh USSR) and G.V. Abelishvili (GruzNIIGiM) and Doctor of Technical Sciences N.P. Chebotarev (Kiyev GMI). In the section of hydro-technical constructions 16 reports were read. Professor K.V. Popov (MIIVKh) eulogized the late Professor V.V. Podarev. Reports concerning irrigation structures, automation and mechanization of irrigation systems, etc., were made by: Dotsents M.V. Korovchinskiy (MIIVKh), A.N. Ivanov (MIIVKh), I.A. Vasil'yeva (MIIVKh), Candidate of Technical Sciences S.G. Melik-Nubarov, Engineer V.A. Andreyev (Sredazgiprovodkhlopok), Assistant S.A. Bryzgalov. Other reports in this section were read by: Candidates of Technical Sciences Z.M. Guzov (Kiyev GMI) and T.I. Aref'yeva (MIIVKh), Professor L.M. Emel'yanov and Dotsent S.V. Vinogradov (MIIVKh), Dotsent G.I. Kolyayev (Kiyev GMI), and Engineers V.S. Misenev (MIIVKh) and V.G. Sokolovskiy (LatNIIGiM). In the section

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99-58-5-8/10

Anniversary Scientific Conference of the Moscow Institute of Engineers
of Hydraulic Engineering imeni V.R. Williams

of utilization of water energy, of pumping stations, hydro-mechanics and hydraulic engineering 19 reports were read. Professor M.F. Poyarkov (MIIVKh), Doctor of Technical Sciences Ya.N. Flekser, Dotsent Kovalevko reported on achievements in rural electrification; exploitation of hydro-electric stations. Professor N.P. Chebotarev and Candidate of Technical Sciences F.T. Markovskiy (Kiyev GMI) reported on calculations of hydraulic power projecting. On problems of projecting and exploitation of pumping stations, reports were read by: Professor M.M. Florinskiy, Dotsents A.A. Tret'yakov and M.I. Lyatskiy, and Candidate of Technical Sciences N.A. Gretsov (MIIVKh). The questions of hydro-mechanics and hydro-dynamics were reported on by: Professors S.S. Byushgens (MIIBKh), F.I. Pikalov (MIIVKh) and G.V. Zheleznyakov, Dotsents V.P. Pilatovskiy, M.V. Korovchinskiy, G.T. Dmitriyev, V.P. Kazakov, Engineer I.G. Kobernik and O.M. Ayvazyan (MIIVKh).

AVAILABLE:
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Library of Congress
1. Conferences-Hydraulic Engineering-Moscow 2. Irrigation systems-
USSR 3. Water supplies-USSR 4. Drainage-USSR 5. Agriculture-
USSR

NATAL'CHUK, M.F., dotsent; SHEYNKIN, G.Yu., kand.tekhn.nauk; VEDENYAPIN,
V.Ye., inzh.; GORBUNOVA, Ye.N., inzh.; VOROPAYEV, G.V., inzh.;
STARETS, R., red.; POLTORAK, I., tekhn.red.

[Use of water on farms of the Vakhsh Valley] Vnutrikhoziaistvennoe
vodopol'zovanie v Vakhshskoi doline. Stalinabad, Tadzhikskoe gos.
izd-vo, 1959. 77 p. (MIRA 14:3)
(Vakhsh Valley--Cotton--Irrigation)

SHEYNKIN, G.Yu.

Hydraulic flushing of sediments in the Kum-Sangir Canal. Izv.
Otd. geol.-khim. i tekhn. AN Tadzh. SSR no.1:55-62 '59. (MIRA 14:8)

1. Moskovskiy institut inzhenerov vodnogo khozyaystva imeni
V.R. Vil'yamsa.
(Vakhsh Valley--Irrigation canals and flumes)

SHEYNKIN, G.Yu.; MALYGIN, V.A.

Effect of the Karalang sedimentation reservoir on the quality of irrigation waters and the ground water conditions of the surrounding lands. Izv. Otd. est. nauk AN Tadzh. SSR no.3:121-130 '59. (MIRA 15:5)

1. Moskovskiy institut inzhenerov vodnogo khozyaystva imeni V.R. Vil'yamsa.
(Vakhsh Valley--Irrigation)

SHEYNKIN, G.Yu., kand.tekhn.nauk; GORBUNOVA, Ye.N., mladskiy nauchnyy
sotrudnik; SURIN, V.A., mladshiy nauchnyy sotrudnik

Automation of irrigation by means of a combined network of
closed stationary and flexible portable polyethylene pipes.
Izv. TSKHA no.3:109-124 '61. (MIRA 14:9)
(Irrigation)

SHEYNKIN, G.Yu.

Automation of cotton irrigation. Dokl. AN Tadzh. SSR 4 no.4:
39-42 '61. (MIRA 15:1)

1. Moskovskaya ordena Lenina sel'skokhozyaystvennaya akademiya
imeni Timiryazeva. Predstavleno chlenom-korrespondentom AN
Tadzhikskoy SSR V.A. Starikovym.
(Cotton--Irrigation)

SHEYNKIN, G.Yu., kand.tekhn.nauk; GORBUNOVA, Ye.N., mladshiy nauchnyy
sotrudnik; SURIN, V.A., mladshiy nauchnyy sotrudnik

Combined irrigation system consisting of closed stationary and
mobile flexible polyethylene pipelines. Gidr. i mel. 13 no.6:
13-24 Je '61. (MIRA 14:6)

(Irrigation)

SHEYNKIN, G.Yu., kand.tekhn.nauk; SURIN, V.A., inzh.

Experiments in the use of flexible polyethylene pipelines in irrigation.
Gidr. i mel. 14 no.7:3-13 J1 '62. (MIRA 17:2)

1. Moskovskaya ordena Lenina sel'skokhozyaystvennaya akademiya imeni
Timiryazeva.

SHCHENIN, G Yu., kand. tekhn. nauk; SHCHIN, V.A., kand. tekhn. nauk

Controlling the sediments in the pipelines of an irrigation network.
Gidr. i mel. 17 no.1:7-17 Ja '65. (MIRA 18:4)

1. Moskovskiy gidromeliorativnyy institut.

S/135/63/000/001/016/016
A006/A101

AUTHOR: Sheynkin, M. A., Engineer

TITLE: Thematic Conference on welding in water vapor shield

PERIODICAL: Svarochnoye proizvodstvo, no. 1, 1963, 45

TEXT: A Conference on welding in water vapor shield was held in Kramatorsk on September 18 - 19, 1962. The Conference was opened by Engineer B. G. Ioffe, Senior welder in the Donets SNKh. The following reports were heard: L. S. Sapiro, Candidate of Technical Sciences (Donets Plant imeni 15-letiya LKSMU) on "Determining the possible application and experimental industrial use of welding in water vapor"; V. I. Lakomskiy, Candidate of Technical Sciences, IES imeni Ye. O. Paton, on "Interaction of hydrogen with metal in electric-arc welding"; Engineer V. A. Gubenko, Kramatorsk NIIPTRASH, on "Physico-chemical processes in welding in a water vapor shield"; A. S. Fal'kevich, Candidate of Technical Sciences, and M. Z. Sheynkina, Engineer, on "Peculiarities in arc-burning and metal transfer during welding in water vapor shield"; and "The effect of the electric power characteristics of the welding arc, burning in water vapor, on the efficiency of welding";

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S/135/61/000/001/012/018
A006/A001

AUTHORS: Pal'kevich, A.S., Candidate of Technical Sciences, Sheynkin, M.Z.,
Engineer

TITLE: On Welding in Water Vapor Medium

PERIODICAL: Svarochnoye proizvodstvo, 1961, No. 1, pp. 43 - 44

TEXT: The use of welding in water vapor is particularly interesting in the construction of main pipelines on the site, due to the cheapness and simplicity of producing the shielding atmosphere. The VNIIST laboratory studied the possibility of using water vapor as a shielding medium when welding steel pipes. A machine was used consisting of an automotive trolley with a AC -59 (AS-59) head designed by VNIIST, assuring oscillations of the electrode across the butt at a required frequency (f) and amplitude, A, and a steam generator designed by the Stalino Plant imeni 15-letiya LKSMU. Planks, 10 - 12 mm thick, were joined by V-welds at an angle of 60 - 70°, using 1 - 1.6 mm diameter wire, with transverse oscillations of the electrode (f = 60 periods/sec; A = 3 - 15 mm), in 2 - 4 layers, on d-c of reverse polarity. Welding conditions were: arc voltage 25 ÷ 30 v; 150 ÷ 200 amp welding current. Water vapor when entering the arc, dissociates into

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On Welding in Water Vapor Medium

S/135/61/000/001/012/018
A006/A001

hydrogen and oxygen. The composition of the gaseous phase in a given temperature range was calculated using the temperature dependence of the equilibrium constant of the dissociation reaction, whereby it was assumed that the sum of partial pressures was equal to one. It appears that the gaseous phase in relation to the liquid metal will always be an oxidizing one, and that during welding considerable oxidation and burning out of a number of steel components will take place. It is also stated that the water vapor medium is more oxidizing than carbon dioxide at 1800- 2,000°C. These theoretical assumptions are confirmed by experimental data, which show that carbon, manganese and particularly silicon burn out intensively. An improved content of alloying elements in the weld metal can be obtained using silico-manganese wire, in particular ЦБ-08Г2ЦА(Sv-08G2SA) wire yielding higher mechanical properties than Sv-08A wire recommended by L.S. Sapiro in his previous investigations. The welding technology in water vapor calls for further studies in order to ensure stabler mechanical properties and elimination of macrodefects in the weld joints, such as slag impurities etc. There are 3 tables.

ASSOCIATION: VNIIST

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S/135/61/000/012/008/008
A006/A101

AUTHORS: Khrenov, K. K., Sheynkin, M. Z., Shipov, K. N., Engineers

TITLE: On techniques for the high-speed filming of a welding arc

PERIODICAL: Svarochnoye proizvodstvo, no. 12, 1961, 34-35

TEXT: For the high-speed filming of a welding arc, the authors suggest a method, replacing the "shadow" method, when light is thrown upon the arc from the side opposite to the camera. The authors propose to illuminate the arc intensively from both the camera and the opposite side. This method yields a more distinct three-dimensional image of the welding arc, the electrode and the molten metal drop. The front illumination of the arc is performed with two carbon-arc KPD-25 (KPD-25) projectors, power-supplied with 150 amps current each. The illumination from the opposite side is made with a 10-kw electric lamp; the light beams are focused on the electrode by a system of lenses; a dark red KC -17 (KS-17) filter is placed before the lens. A CKC-1 (SKS-1) camera with "Industar-55" lens (F = 300 mm) is employed. For the purpose of establishing volt-ampere characteristics of the arc and of determining the dependence of arc voltage on its length, and the nature of metal transfer,

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On techniques for the high-speed filming ...

S/135/61/000/012/008/008
A006/A101

high-speed filming is synchronized with current and arc voltage oscillographing. For this purpose a special circuit was developed which serves to close the time relay contacts, which switch-on the camera and the oscillograph when the "Start" button is pressed. Difficulties of synchronization are facilitated by the following operation: an oscillograph vibrator is switched on with the aid of contacts and registers the sinusoid of the alternating current. There are 3 figures and 4 Soviet-bloc references. ✓

Card 2/2

SHEYNKIN, M.Z., inzh.

In the Coordinating Council on Welding. Svar. proizv. no.3:43
Mr '62. (MIRA 15:2)

(Electric welding--Congresses)

KHRENOV, K.K., inzh.; SHEYNKIN, M.Z., inzh.; SHIPOV, K.N., inzh.

Technique of making high speed motion pictures of the welding
arc. Svar. proizv. no.12:34-35 D '61. (MIRA 14:12)

(Motion ~~picture~~ photography, High speed—Scientific applications)

SHEYINKIN, M.Z., inzh.

Conference on the introduction in industry of new methods of
mechanized welding with an open arc. Svar. proizv. no.2:43-44
F '62. (MIRA 15:2)

(Electric welding--Congresses)

SHEYNKIN, M.Z., inzh.

Productivity of water vapor shielded welding. Svar. proizv. no.3:
24-25 Mr '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov.
(Electric welding) (Protective atmospheres)

SHEYNKIN, M.Z.; KHRENOV, K.K.

Some characteristics of the glowing of the arc and metal transfer
in welding with a consumable electrode in a water vapor medium.
Avtom. svar. 15 no.9:40-46 S '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh
splavov.

(Electric welding--Equipment and supplies)

SHEYNKIN, M.Z., kand. tekhn. nauk

Seminar at the Exhibition of the Achievements of the National
Economy of the U.S.S.R. "New methods and equipment for welding
pipelines". Svar. proizv. no.8:44 Ag '64.

(MIRA 17:9)

SHEYNKIN, M.Z.

Seminars on advanced methods for building gas and oil pipelines;
new methods and equipment for welding pipelines. Stroi. trub. 9
no.7:16 J1 '64. (MIRA 17:11)

TARLINSKIY, V.D., inzh.; SHEYNKIN, M.Z., kand. tekhn. nauk

New technology of pipe welding. Inform. biul. VDEKH no.10:
10-11 0 '64 (MIRA 18:1)

TARLINSKIY, V.D.; SHEYNKIN, M.Z.

Investigating the possibilities of increasing the efficiency
of welding pipelines with powder wire. Stroi. truboprov. 9
no.8:14-17 Ag '64. (MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'-
stvu magistral'nykh truboprovodov.

31865
S/123/61/000/023/017/018
A052/A101

26.7/81

AUTHORS: Romanenko, S. V., Sheynkman, A. G.

TITLE: Temperature changes of the supersonic gas flow in a tube with heat elimination

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 23, 1961, 28, abstract 231175 ("Izv. Kiyevsk. politekhn. in-ta", no. 30, 1960, 31-37)

TEXT: A theoretical analysis is carried out of temperature changes of a one-dimensional supersonic flow passing in a tube with heat elimination at a constant temperature of the wall T_w . The analysis is based on the assumption that under above conditions the generalized hydrodynamic theory of heat exchange holds true. It has been found out that at a supersonic flowing in a tube at any $\bar{\epsilon} = \frac{T_0}{T_w}$ (T_0 - impact temperature) up to $\bar{\epsilon} \rightarrow \infty$ only deceleration of the flow can take place. Depending on the relation of $\bar{\epsilon}$ and M the temperature of the flow can increase and decrease. In the diagram ($\bar{\epsilon}$, M) the boundary line is found, which separates the regions of increase and decrease of the temperature and its asymptotes; when the boundary line is intersected by integral curves, the temperature in the flow reaches maximum (on its right-hand branch)

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X

Temperature changes of the supersonic ...

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S/123/61/000/023/017/018
AO52/A101

and minimum (on the left-hand one). The position of the probable point of contact of one of the integral curves with the boundary line is determined. The temperature changes along this integral curve as well as along the curves below it have a monotonous character. The physical nature of the discussed phenomena is explained.

V. Kirillov

[Abstracter's note: Complete translation]

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X

32534
E/096/62/000/001/003/008
E194/E955

26.2/20
AUTHORS.

Deych, M.E., Doctor of Technical Sciences,
Professor; Sheynkman, A.G., Engineer
Determination of the optimum amount of upper overlap
of a shrouded turbine stage

TITLE.

PERIODICAL:

Teploenergetika, no.1, 1962, 28-31

TEXT:

The existence of upper overlap, by which is meant the amount by which the external diameter of the runner blades exceeds the corresponding diameter of the nozzle blades (or guide vanes) (Δl_n in Fig.1), improves the efficiency of a shrouded stage. There is an optimum amount of upper overlap, and deviation from this optimum may reduce stage efficiency by up to 4%. The Aerodynamics Laboratory of TMZ made tests on an air turbine with a full-sized stage type β -6-3 (VR-6-3), illustrated schematically in Fig.1, for which $D_{cp2} = 614.8$ mm, and $l_2 = 41.1$ mm. The axial clearance was varied from 1 to 3 mm and the radial clearance from 1 to 4.5 mm. The upper overlap was altered from 0 to 3 mm by fitting pieces in the nozzle boxes. The tests were made at $M_1 = 0.3$; $Re_1 = 4 \times 10^5$. The optimum velocity ratio

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X

32534

S/096/62/000/001/003/008
E194/E955

Determination of the optimum...

$u/c = 0.49 - 0.50$. The graph of Fig.4 plots deviation from the optimum efficiency (on the y axis) against excursions from the optimum upper overlap, and shows that insufficient overlap is generally more harmful than a corresponding excursion above the optimum. It is considered that acceptable manufacturing tolerances on the optimum overlap are: when overlap $\Delta l_n \leq 3$ mm, a tolerance of -25% and $+50\%$; when $\Delta l_n > 3$ mm, a tolerance of -1 mm and $+1.5$ mm. To determine the optimum amount of upper overlap of a shrouded turbine stage when (with a notation of Fig.1) $D_{cpl}/l_1 > 15$, $M_1 < 0.5$, $Q_n < 0.6$, $\delta_a < 0.005 D_{cpl}$ the following formula is recommended:

$$(\Delta l_n)_{opt} = 0.7 \frac{\rho_n^{\frac{1}{2}}}{1 - \rho_n} \cdot \frac{\delta_{equiv}}{\sin \alpha_{n1}} \quad [mm]$$

where

$$\delta_{equiv} = \frac{\delta_a}{1 + n_p (Q_n / l_1)^{\frac{1}{2}}} \quad [mm]$$

ann. 4/3

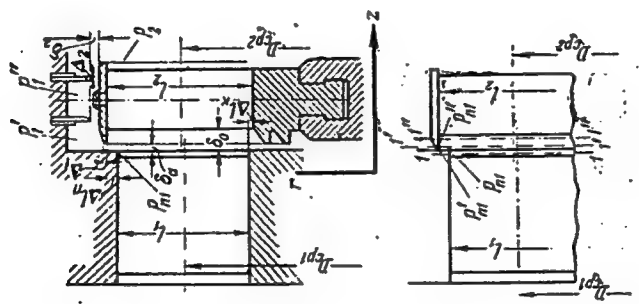
X

Determination of the optimum ...

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E194/E955

There are 4 figures, 1 table and 8 Soviet-bloc references.

ASSOCIATION: MEI Ural'skiy turbomotornyy zavod
(MEI and Ural Turbine Engine Works)



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Fig.1.

X

DEYCH, M.Ye., doktor tekhn.nauk, prof.; SHEYNKMAN, A.G., inzh.

Determining the optimum magnitude of the upper overlapping
of a shrouded turbine stage. Teploenergetika 9 no.1:28-31 Ja
'62. (MIRA 14:12)

1. Moskovskiy energeticheskiy institut i Ural'skiy
turbomotornyy zavod.
(Turbines)

S/114/62/000/008/004/006
E194/E455

AUTHORS: Sheynkman, A.G., Engineer,
Tokmantsev, N.K., Engineer, Yurkin, V.S., Engineer,

TITLE: The influence of blade bottom overlap on turbine stage efficiency

1 PERIODICAL: Energomashinostroyeniye, no.8, 1962, 28-29
e

f. TEXT: The blade bottom overlap in turbines is usually made
s1 positive, i.e. the aperture between runner blades extends further
1. towards the shaft axis than does the adjoining nozzle aperture.
2 This design assumes the presence of pressure equalizing holes in
the discs, so that there is no leakage through the axial
clearance at the blade roots. The steam particles from the
nozzle tend to spread radially outwards and not inwards, so it
might seem possible to use negative overlaps. Accordingly, the
Ural'skiy turbomotornyy zavod (Ural Turbine Works) carried out a
series of tests on a full-scale stage of a turbine type BP-6-3
(VR-6-3). The initial stage had zero overlap and the overlap was
altered by fixing inserts into the radial surface of the nozzle
ducts. Tests were made with and without pressure-relief holes in
Card 1/2

Card :

S/096/63/000/001/002/006
E194/E155

AUTHORS: Deych, M.Ye., Doctor of Technical Sciences, and
Sheynkman, A.G., Engineer

TITLE: An investigation of rotating regulating diaphragms for
the district-heating tappings of 25 - 100 MW turbines

PERIODICAL: Teploenergetika, no.1, 1963, 14-21.

TEXT: Regulating diaphragms are used to control the steam
flow to the l.p. cylinder, and hence the pressure in the district-
heating tapping. Two types are distinguished: 'unseparated', in
which the complete first ring of blades rotates about its axis, the
flat discharge edges of the blade remaining in contact with the
flat inlet edges of the second row; and 'separated', in which each
blade of the first ring rotates about its own axis whilst its
discharge tip remains in contact with the inlet tip of the
corresponding blade of the second row. These regulating diaphragms
are much simpler than the usual valves, but experimental data for
their design is inadequate. Accordingly, flow in the ducts and
the influence of various design features on diaphragm operation
was investigated, using an optical shadow technique to study flow

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An investigation of rotating ...

S/096/63/000/001/002/006
E194/E155

irregularities that might lead to vibration. The type of flow in the diaphragm ducts was found to depend on the ratio between the inlet and discharge sections. In the fully-open position, bands of low and high pressure typical of supersonic speeds were observed. At partial openings considerable swirl was caused behind the blades of the second row but the discharge flow was straight. The discharge angle increases as the aperture is reduced. The optically-observed results were confirmed by discharge speed measurements. Losses in the regulating diaphragm are particularly high when it is nearly closed because of vortex formation and pressure jumps in the duct. The direction of closing influences the velocity distribution and flow angles. It was found that the 'separated' construction could be as efficient as the 'unseparated' in the fully-opened position; in the partially-opened position the discharge velocity distribution was more uniform but the losses were greater because the ducts are longer and flow conditions over the curved surfaces are poor. Therefore, the question of using a 'separated' diaphragm is mainly a question of diaphragm width. The main object should be to obtain minimum

Card 2/4

An investigation of rotating ...

S/096/63/000/001/002/006
E194/E155

losses and straight flow throughout the discharge section. After further discussion of the experimental results it is concluded that in designing these diaphragms; the number of throttle ducts should be the same as the number of blade channels; 'unseparated' construction is preferred; a sloping inlet is preferred with an angle of 60-70°; but if inlet is axial, the nozzle duct length at the centre line should be greater than with the sloping inlet, to reduce the relative curvature of the concave surface; and, finally, the inlet edges of the first ring blades should be rounded instead of the more usual conical shape. Recommendations are also made about blading types. A low-pressure regulating diaphragm on these lines is as efficient as one with the usual nozzle arrangement in the fully-opened position. Tests on regulating gear for turbines of 50 - 100 MW confirmed figures obtained by the simple design formula recommended. It is shown that total losses in the flow-regulating equipment depend both on the degree of opening and on the operating conditions, and characteristic curves are constructed to illustrate this point. There are 8 figures.

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An investigation of rotating ...

S/096/63/000/001/002/006
E194/E155

ASSOCIATION: Moskovskiy energeticheskiy institut
(Moscow Power Engineering Institute)
Ural'skiy turbomotornyy zavod
(Ural Turbine Works)



Card 4/4

SHEYNKMAN, A.G., inzh.; TOKMANTSEV, N.K., inzh.

Efficient design of steam turbine nozzle boxes.
Energomashinostroenie 9 no.3:40-41 Mr'63.

(MIRA 17:5)

DEYCH, M.Ye.; SHEYNKMAN, A.G.

New nozzle blade profiles regulating the rotational diaphragms
of bleed turbines. Trudy MEI no.47:37-48 '63. (MIRA 17:1)

SHEYNKMAN, A.G., inzh.

Effect of the upper overlap and open gaps on the efficiency of a
bandaged banded turbine stage. Energorashinostroenie 10 no.6:34-
36 Je '64. (MIRA 17:9)

DEYCH, M. Ye., doktor tekhn. nauk, prof.; SHEYNKMAN, A.G., kand. tekhn. nauk; FILIPPOV, G.A., kand. tekhn. nauk; BARANOV, V.A., kand. tekhn. nauk; KIRSANOVA, A.A., inzh.; MIKHAYLOV, B.A., inzh.

Experimental study of a model take-off regulatory stage with a rotary diaphragm. Energomashinostroenie. 11 no.2:14-17 F'65.

(NIRA 1842)

ACC NR: AP7001449

(N)

SOURCE CODE: UR/0413/66/000/021/0184/0184

INVENTORS: Deych, M. Ye.; Sheynkman, A. G.

ORG: none

TITLE: A regulating diaphragm of a turbine engine. Class 46, No. 188222

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 184

TOPIC TAGS: turbine engine, engine component, rotating engine

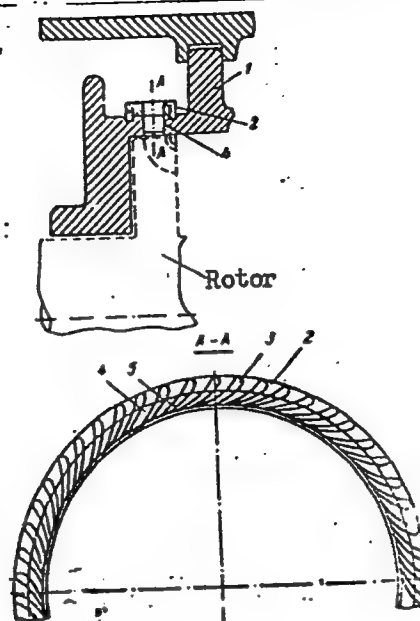
ABSTRACT: This Author Certificate presents a regulating diaphragm of a turbine engine. The diaphragm contains a rotary ring with supports and a directing device with blades which form elongations of the supports. To be used in radial and radial-axial type turbines, the supports and the blades are placed on a cylindrical surface (see Fig. 1). In an alternate design, one or both walls at the intake portion of the ducts in the rotary ring and in the directing device are placed at a desired angle to the tangent plane of the cylindrical surface at the junction of the rotary ring and the directing device.

Card 1/2

UDC: 62-226-546.5

ACC NR: AP7001449

Fig. 1. 1 - diaphragm; 2 - rotary ring;
3 - supports; 4 - directing
device; 5 - blade



Orig. art. has: 1 figure.

SUB CODE: 21 / SUBM DATE: 03May63

Card 2/2

KRESHCHEV, G.V.; SHEYNKMAN, A.I.

Dependence of the reflection coefficient of powders on the particle size. Trudy Chel.gos. ped. inst. 2:185-190 '64.

Anomalous scattering of X-rays by tiny crystals of the precipitating β -phase at the late stages of breakdown of a supersaturated solid solution of zinc in aluminum (AlZn). Ibid.:191-194 (MIRA 18:9)

KIESHCHIEV, G.V.; SHEYNKMAN, A.I.; BOBYRENKO, Yu.Ya.; Prinimal uchastiye
TITOV, G.K.

Effect of metal oxides on the polymorphic transformation of anatase
to rutile. Lakokras.mat. i ikh prim. no.2:21-23 '64.
(MIRA 17:4)

ALEK ANDRONOV, I.V.; TROFIN, V.A.; SHEYNKMAN, A.I.; SHEREMET'YEV, G.P.

Spectral reflection power of dyeing pigments on the basis of
nickel titanate. Trudy Chel. gos. ped. inst. 2:165-173 '64.
(MIRA 18:9)

L 10870-65 ESD(t)/ESD(c)/ESD(gs)/BSD/AS(mp)-2

ACCESSION NR: AR4046539

S/0058/64/000/008/D056/D056

SOURCE: Ref. zh. Fizika, Abs. 8D425

B

AUTHORS: Kleshchev, G. V.; Sheynkman, A. I.

TITLE: Dependence of the reflection coefficient of a powder on the particle dimension

CITED SOURCE: Tr. Chelyab. gos. ped. in-t, v. 2, 1964, 185-190

TOPIC TAGS: powder, reflection coefficient, light reflection

TRANSLATION: A formula is obtained for the dependence of the reflectivity R of a powder on the dimension of the powder particles, and on their absorbing ability. The calculation was made for the limiting case of an infinitely thick layer of powder. The experimental values of R determined for powdered colored glass are in good agreement with the values of R calculated theoretically. V. K.

Card 1/2

L-10870-65
ACCESSION NR: AR4046539

SUB CODE: OP

0
ENCL: 00

Card 2/2

SHEYNKMAN, A.K.; KAZARINOVA, N.F.; BABIN, Ye.P.

N-acylpyridinium salts as pyridilic agents in Fridel-Crafts reactions. Zhur.VKHO 7 no.1:112-113 '62. (MIRA 15:3)

1. Donetskoye otdeleniye instituta organicheskoy khimii AN SSSR.
(Pyridinium compounds) (Friedel-Crafts reactions)

KOLOMOYTSEV, L.R.; KAZARINOVA, N.F.; GEONYA, N.I.; SHEYNKMAN, A.K.

Antibacterial action of some N-substituted pyridine derivatives.
Report No.1. Mikrobiol.zhur. 24 no.3:23-28 '62. (MIRA 15:8)

1. Donetskoye otdeleniye Instituta organicheskoy khimii AN UkrSSR.
(PYRIDINE) (BACTERIA, EFFECT OF DRUGS ON)

SHEYNKMAN, A. K.; ROZENBERG, B. A.; ARTAMONOV, A. A.

Vinylpyridines and the polymers derived from them. Khim.
prom. no.3:181-187 Mr '63. (MIRA 16:4)

1. Donetskoye otdeleniye Instituta organicheskoy khimii
Akademii nauk UkrSSR.

(Pyridine) (Polymers)

KOLOMOYTSEV, L.R.; GEONYA, N.I. (Heonia, N.H.); SHEYNKMAN, A.K.

Antibacterial effect of some N-substituted pyridine derivatives.
Report No. 2. Mikrobiol. zhur. 25 no. 5:58-67 '63. (MIRA 16:12)

1. Meditsinskiy institut i Donetskii filial Instituta organicheskoy
khimii AN Ukr SSR, Donetsk.

KAZARINOVA, N.F.; BABIN, Ye.P.; SOLOMKO, K.A.; KOTELNETS, M.I.;
ARTAMONOV, A.A.; SHEYNKMAN, A.K.

Preparation of 4-ethylpyridine. Zhur.prikl.khim, 36 no.3:
649-654 My '63. (MIRA 16:5)
(Pyridine)

SHEYNKMAN, A.K.; RUDENKO, N.Z.; KAZARINOVA, N.F.; LYSENKO, V.B.

Structure of quaternary salts of 4-(p-dimethylaminophenyl)- and
4-(p-dimethylaminostyryl)pyridines. Zhur.ob.khim. 33 no.6:1964-
1969 Je '63. (MIRA 16:7)

1. Donetskoye otdeleniye Instituta organicheskoy khimii AN UkrSSR
i Donetskoy gosudarstvennyy meditsinskiy institut.
(Pyridinium compounds)

KOST, A.N.; SHEYNKMAN, A.K.

Activation of methyl groups linked to heterocycles. Zhur.ob.khim.
33 no.6:2077-2078 Je '63. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i
Donetskoye otdeleniye Instituta organicheskoy khimii Ukrainskoy AN.
(Methyl group) (Heterocyclic compounds)

ARTAMONOV, A.A.; ROZENBERG, B.A.; SHEYNKMAN, A.K.

Pyridylethylation reaction. Reakts. i metod. issl. org. soed.
14.173-298 '64. (MIRA 18:3)